

AMENDMENTS

In the Claims

Claims 1 and 6 are amended as follows:

sub D17
C1

1. (TWICE AMENDED) A method for forming within a silicon semiconductor substrate employed within a microelectronics fabrication a silicon oxide dielectric layer comprising:

- providing a silicon semiconductor substrate;
- forming over the silicon semiconductor substrate a patterned silicon nitride mask layer;
- oxidizing the silicon semiconductor substrate locally at a first oxidation temperature of at least above 1100 degrees centigrade through the silicon nitride mask pattern to form silicon oxide dielectric layers to prevent out-diffusion of nitrogen species and minimize formation of silicon oxynitride inclusions within the silicon oxide layers ; and
- oxidizing the silicon substrate further at a second temperature no greater than 1100 degrees centigrade, as desired to form greater thickness of said silicon oxide dielectric layers.

sub D27
C2
Cm+

6. (THRICE AMENDED) A method for forming within a silicon semiconductor substrate employed within an integrated circuit microelectronics fabrication a silicon oxide dielectric field oxide (FOX) isolation layer comprising:

- providing a silicon semiconductor substrate;
- forming upon the silicon semiconductor substrate a silicon oxide pad oxide layer;
- forming upon the silicon oxide pad oxide layer a patterned silicon nitride mask layer;

TSMC 98-262
Serial Number 09/325,951

oxidizing the silicon substrate locally at a first oxidation temperature of at least above 1100 degrees centigrade through the patterned silicon nitride mask layer to form silicon oxide dielectric field oxide (FOX) isolation layers to prevent out-diffusion of nitrogen species and minimize formation of silicon oxynitride inclusions within the silicon oxide dielectric layers; and

oxidizing the silicon substrate further at a second temperature no greater than 1100 degrees centigrade, as desired to form greater thickness of said silicon oxide dielectric layers.

C2
Cmcd